

The abstract submission for SPIN2008 was first discussed. About nine abstracts covering AGS and RHIC polarized proton related work will be submitted.

Fanglei reported her progress on emittance growth tracking. She used spink code to track particles with and without tune jumps from  $G\gamma = 43.5$  to 44.5. The lattice distortion due to partial snakes are very small at the higher energy, which makes the AGS lattice update during the ramp less a problem. The AGS lattice is updated every turn during the tune jump. 200 Particles with a Gaussian distribution are used. The results showed emittance growth even without tune jump, which is not physical. Thomas asked how the emittance was calculated and if the number of particles used is too small. To make sure that the code is bug free, Waldo suggested to put particles at ellipse and trace their actions along the ramp. For that matter, one particle tracking should also be very useful. Mei asked if SIXTRACK is better than spink for the emittance growth tracking. Thomas commented that SIXTRACK is needed if nonlinearity is a concern.

Following Thomas' suggestion, Nick developed a new injection lattice with vertical tune higher than 8.95 in the expense of beta functions. He only uses six power supplies as current scheme does. As the first pass, such a lattice can be generated with modest beta function maximum. The compensation quads were not turned off fast enough in this solution, but it can be done. There are three solutions now: the one with higher  $Q_y$  near injection, the previous low  $Q_y$  solution by Nick, and one from actual magnet currents used by Keith. By comparing the last two solutions, we may get clue on how to transfer the new solution to a real one.

Thomas then asked about the ORM analysis status. The goal is to get beta functions as function of time in an AGS cycle (well, at least at injection and extraction). Vincent is working on bare AGS ones. If we allow all dipoles vary, the total parameters would be more than 240 and it is hard to get meaningful results. Kevin suggested to use only quadrupoles as free parameters to fit the data.

Haixin